MIDDLE FLY RESTORATION PROJECT

Aquatic Restoration Biological Opinion (ARBOII) - Project Notification Form

November 23, 2020

Introduction

This project involves implementing restoration in Middle Fly Creek to improve habitat for listed spring/summer chinook and summer steelhead. The project is located in T 5S, R 35.5E, S 3, 4, 8, 9. It is located in the Lower Fly Creek Subwatershed (170601040108).

Existing Condition

Middle Fly Creek is currently apart of the McCarty Sheep Allotment. Fly Creek is only used for watering and not used for any significant grazing. In the late 1980s/early 1990s, sill logs were added into the stream at specific locations. In 2009, large wood was added to the stream to enhance pool development and was effective in many parts of the project area. However, the 2019 peak flow event reduced their effectiveness. A streambottom road was recontoured and planted. Currently, the stream channel is simplified with low levels of large wood, course substrate, and lack of quality pool habitat. Floodplain inundation and function is limited.

Goal/Objectives

1: Activate Side Channel Scrolls

Encourage and create perennial side channels through channel spanning log jam construction.

2: Restore Hydrologic Function

Increase hydration of a laterally confined channel to improve groundwater retention through channel spanning log jam construction.

3: Improve Fish Habitat

Restore habitat complexity. Existing LWD structures will be modified and additional whole trees will be placed. These structures will encourage scour pool habitat, spawning gravel recruitment and fish cover.

Timing: The project will occur from September 1, 2021 – October of 2022. Helicopter placement will occur in October 2021. Hand placement will occur in October 2021, and July through October of 2022. An instream work window variance will be needed, to prevent effects to goshawk nesting within the helicopter flight paths and the amount of time needed to complete hand placement of racking material. An instream work window variance was obtained on Fly creek in 2009 for instream work in September. No digging or ground-based machinery will be in or adjacent to the stream – only helicopter and hand placement of wood will occur. Tree removal and staging from roads will occur in September of 2021. Rehabilitation and seeding will occur in October and November of 2021.

Applicable Project Design Criteria (PDCs), Conservation Measures (CMs) associated with ARBOII:

(1) Large Wood and Boulder Projects – (i., ii., iii., vi, vii, viii)
(2) Tree Removal for Large Wood Projects – (i., ii., iii., iv., v., vi.)
(3) Riparian Vegetation Planting (a., b., c., e.)
(4) Minor Variance for Process (3. a.,b.,c.,d., e., f.)

The General Aquatic Conservation Measures and all of the above PDCs will be adhered to and incorporated into the contract and/or force account work plans for the project.

Project Description

The project would construct debris jams and habitat structures at 56 sites within the middle 3.0 miles of Fly Creek (RM 4.0 – RM 7.0). This would include approximately 1613 pieces of large wood (1613 trees). An additional 387 whole trees, 100 felled trees and 400 tops would be placed within the stream for habitat complexity. Approximately, 2400 trees and tops will be flown in and placed by helicopter. There will be 100 trees directionally felled by hand and 85% of the racking material will be incorporated into the structure and stream through hand placement.

• There will be 38 small debris jams that will involve 25 pieces of large wood, which includes 5 large trees with rootwads (> 20" dbh) & 50' long), 8 medium trees with rootwads (14" – 20" dbh & 50' long), 8 small trees/logs (10" – 14" dbh & 30' – 50' long), and 4 whole trees. These structures are designed for floodplain inundation, side channel activation and habitat complexity.
• There will be 12 large debris jams that will involve 50 pieces of large wood, which includes 10 large trees with rootwads (> 20" dbh & 50' long), 16 medium trees with rootwads (14" – 20" dbh & 50' long), 16 small trees/logs (10" – 14" dbh & 30' – 50' long), and 8 whole trees. These structures are designed for floodplain inundation, channel activation and habitat complexity.
• There will be 6 whole tree structures, involving 63 whole trees. These structures are intended to provide habitat complexity and fish cover.
• There will be 387 additional whole trees and 400 tops placed upstream and downstream of the debris jams to promote habitat complexity and fish cover.
• There will be 100 trees directionally felled into the stream to promote habitat complexity and fish cover.
• A total of 2500 large wood pieces will be placed into the Middle Fly Restoration Project in 2021. There are a total of 2100 large trees needed for the project. Of these, 310 trees will be between 21" and 29" dbh, and 1790 trees between 10" and 20" dbh. All of the medium and large sized trees will be a minimum of 50' long (whole trees could be longer). The small sized trees are a minimum of 30' long. These trees will be obtained from within 20' of the road prisms of the 5115, 5115205, 300, 169, 180, 460 & 450 roads. The trees would be staged on these road prisms for helicopter transport and placement into Fly Creek.

There will be 100 trees directionally felled into Middle Fly Creek from the riparian area adjacent to the stream. In addition, racking material (small trees and limbs) will be thinned in the riparian

area and incorporated into the structures and stream by hand placement. All of the disturbed areas will be seeded.

Extent: The project would add wood to approximately 3.0 miles of middle Fly Creek. Seeding will occur throughout the project area.

Acres Modified: 40 acres (includes acreage modified for all of the above activities).

Designated Critical Habitat and Species Affected: Middle Fly Creek is spawning and rearing habitat for Snake River Basin summer steelhead and redband trout. The stream is also rearing habitat for the Snake River Basin spring chinook salmon. The summer steelhead and spring/summer chinook are federally listed under ESA as threatened species. Redband trout are on the Regional Forester's Sensitive Species List.

Monitoring:

(1) Drone: Drone imaging will be collected, yearly, for five years by GRMW.
(2) Stream Survey: Region 6 Level II Stream Habitat Inventory would be conducted prior to (completed) and @ year 1 and year 5 after completion. This monitoring will be completed by the USFS.
(3) Structure construction: Monitoring of structures would involve photo points of before and after operations occur. Follow up photo points would occur at year 1 - 3 after project completion. This monitoring will be completed by the USFS.
(4) Noxious weeds: Noxious weeds would be monitored, yearly, for three years after project operations. This monitoring will be completed by the USFS.
(5) Reports: A final report that describes the actual implementation of this project and associated monitoring would be completed in the winter of 2021.

Additional Considerations: There are no other additional considerations.

Project Contact: Joe Platz**,** Fisheries Biologist

Literature Cited:

(1) Pacific States Marine Fisheries Commission. 2008. STREAMNET: Fish Data for the Northwest. http://www.streamnet.org/.